

WHAT IS CLAIMED IS:

1. A liquid crystal display device, comprising:
a substrate;
a common bus line over said substrate;
a first insulator over said common bus line;
a first electrode over said first insulator, said first electrode at least partially covering said common bus line to form a first storage capacitor between said first electrode and said common bus line;

a second insulator over said first electrode; and
a second electrode over said second insulator, said second electrode at least partially covering said first electrode to form a second storage capacitor between said first and second electrodes.

2. The device according to claim 1, wherein said second electrode is conductively coupled to said common bus line.

3. The device according to claim 1, wherein said second electrode is conductively coupled to said common bus line through a hole in said first and second insulators.

4. The device according to claim 1, wherein said first electrode includes a data electrode.

5. The device according to claim 1, wherein said first insulator includes a gate insulator.

6. The device according to claim 1, wherein said second electrode includes a common electrode.

7. The device according to claim 1, wherein said second insulator includes a passivation layer.

8. The device according to claim 1, further comprising:
a plurality of gate and data bus lines aligned in said substrate to define a plurality of pixel regions, wherein said second electrode at least partially overlies said data bus lines.

9. The device according to claim 1, further comprising an alignment layer over said second electrode.

10. The device according to claim 6, wherein said common electrode includes a transparent conductive material.

11. The device according to claim 6, wherein said common electrode includes indium tin oxide.

12. The device according to claim 8, wherein said data bus lines include a highly conductive metal.

13. The device according to claim 8, wherein said data bus lines include one of a Mo metal layer, Mo/Al/Mo triple metal layers, or Cr/Al/Cr triple metal layers.

14. The device according to claim 9, wherein said alignment layer includes one of polyimide or polyamide, or polyvinylcinnamate or polysiloxane based materials.

15. A liquid crystal display device, comprising:
a substrate;
a plurality of gate and data bus lines over the substrate, defining a plurality of pixel regions;
a thin film transistor coupled to each of said pixel regions and respective gate and data bus lines;
a passivation layer over said thin film transistor and at least partially covering said data bus line; and

a common electrode over said passivation layer and at least partially covering said data bus line.

16. The device according to claim 15, wherein said data bus line includes a highly conductive metal.

17. The device according to claim 15, wherein said data bus line includes one of a Mo metal layer, Mo/Al/Mo triple metal layers, or Cr/Al/Cr triple metal layers.

18. A liquid crystal display device, comprising:
a substrate;
a common bus line over said substrate;
a first insulator over said common bus line;
a data electrode over said first insulator;
a second insulator over said data electrode; and
a common electrode over said second insulator and coupled to said common bus line.

19. The device according to claim 18, wherein said common electrode is conductively coupled to said common bus line through a hole in said first and second insulators.